

# Open Build Service

Pakete, Projekte und Distributionen einfacher bauen

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# Geschichte

- `tar xfv foo.tar.bz2`
- `configure --prefix=/usr`
- `make`
- `sudo make install`

# Pakete bauen

## RPM / DEB Formate

- Bauen
  - Definierte Bauvorschriften
  - Patches
  - (Bau-)Abhängigkeiten
- Installieren
  - Abhängigkeiten
  - Scripte
  - deinstallieren

# Probleme

- Pakete konsistent bauen
- Pakete für andere bauen und publizieren
- Pakete für mehrere Distributionen bauen
- Pakete für mehr als 1 Prozessor Architektur bauen
- Mehr als 1 Paket im Verbund bauen

# Distributions



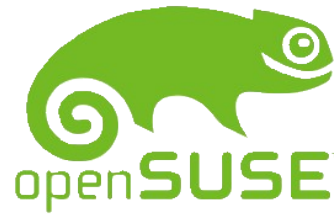
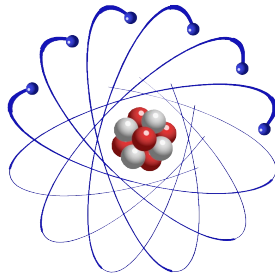
debian



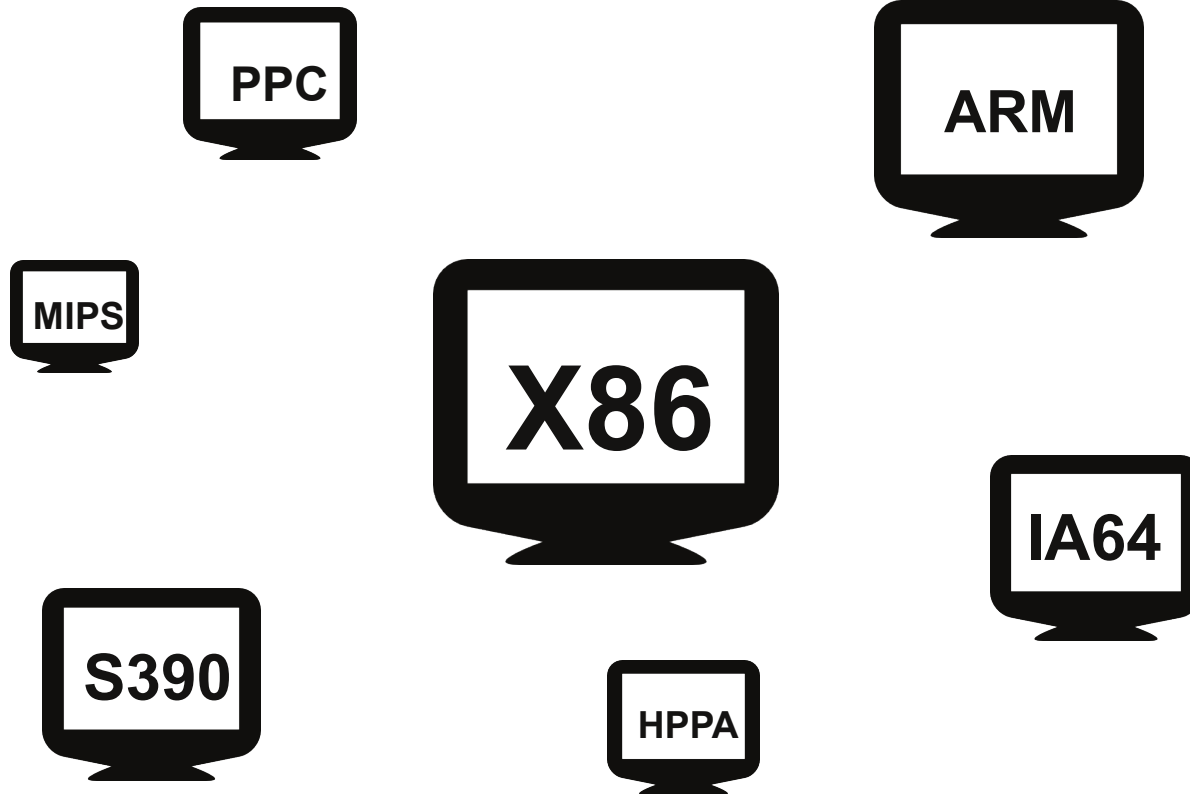
CentOS™



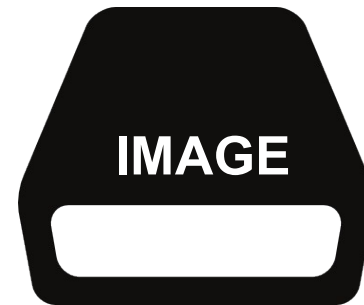
redhat.



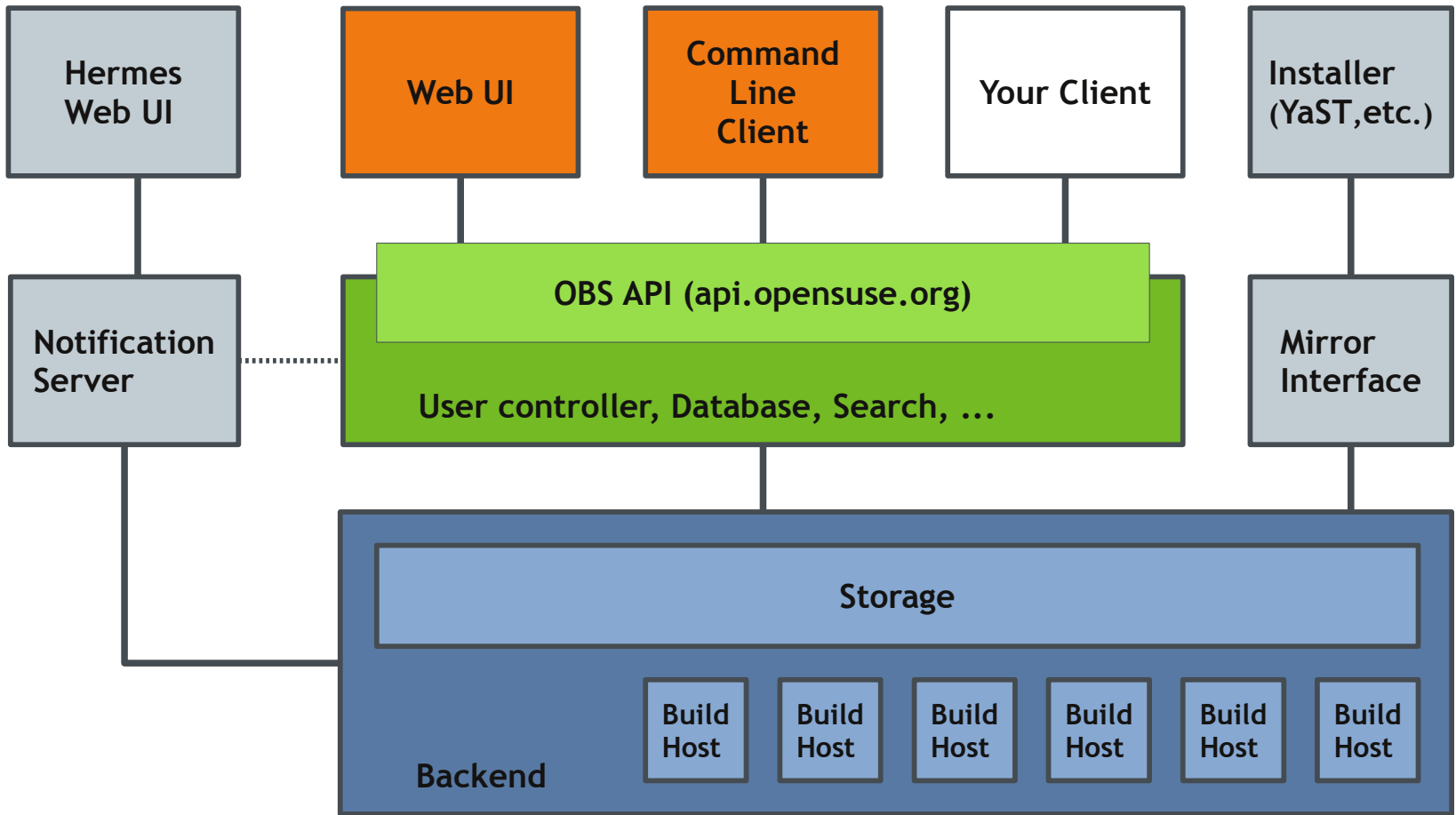
# Architekturen



# Output

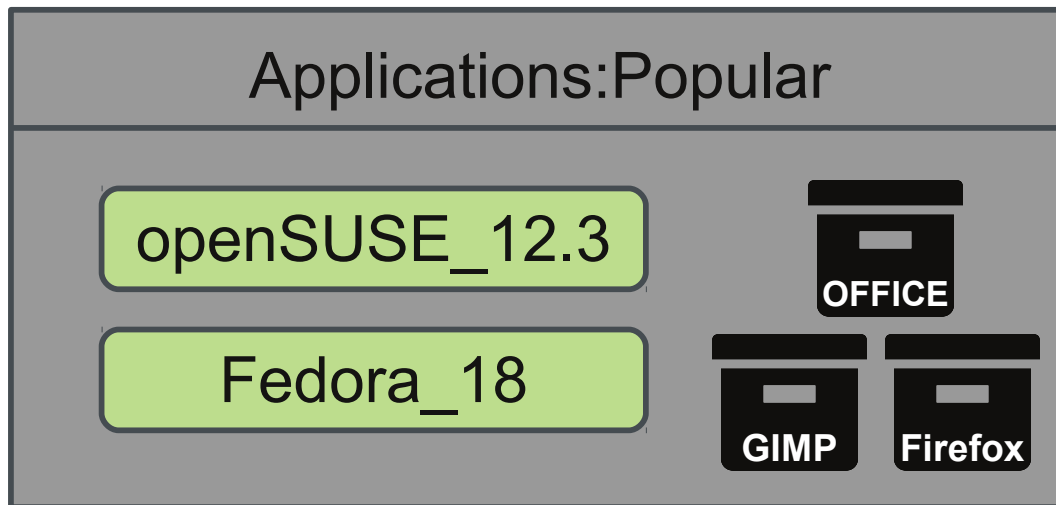


# Overview

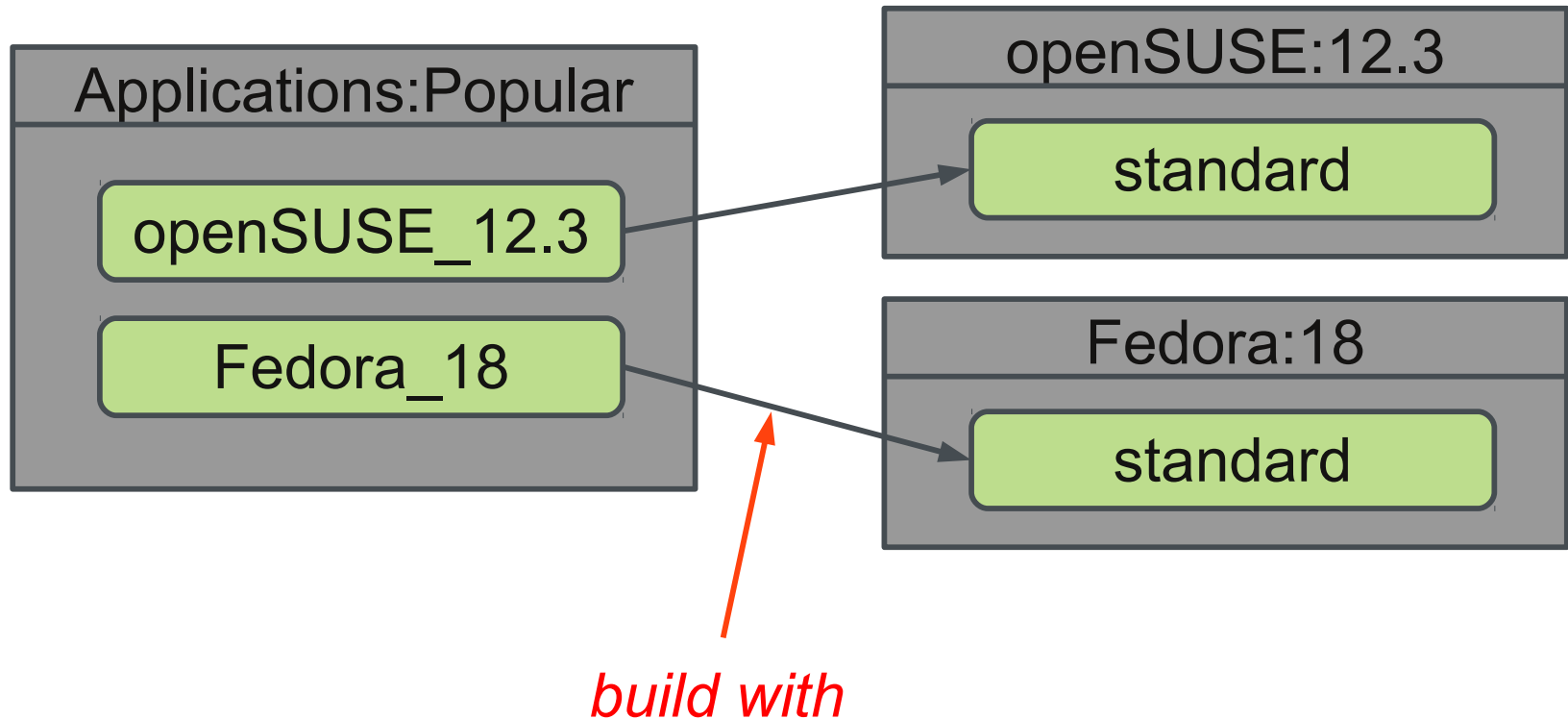




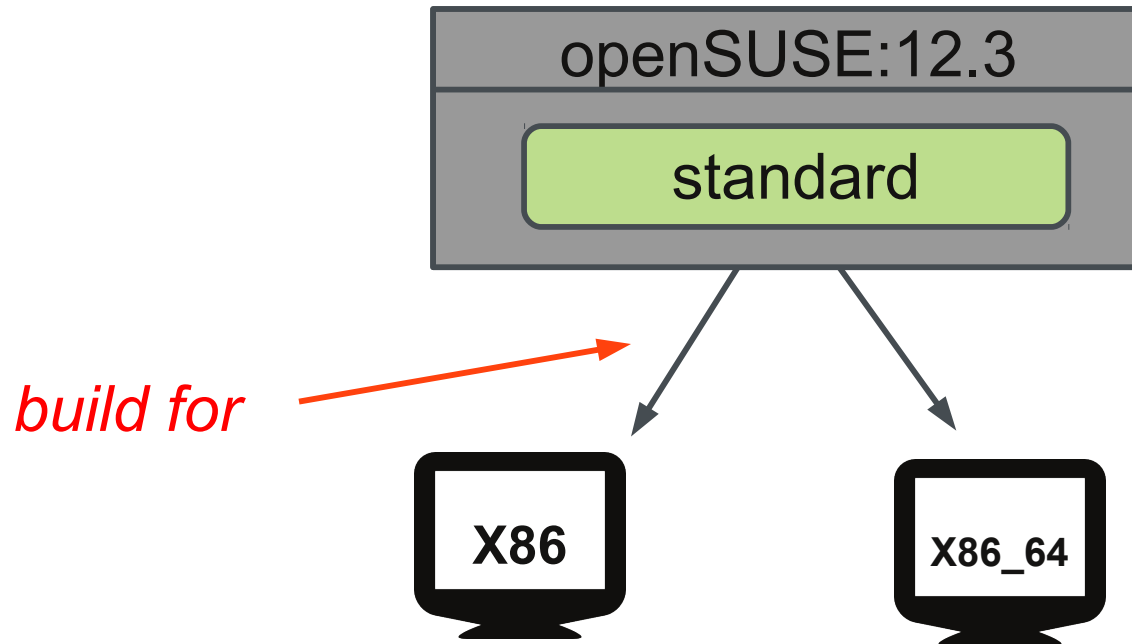
# Project Model



# Project Model



# Project Model



# API

https://build.opensuse.org/project/show?project=devel%3Alanguages%3Aparrot

Downloads Support Community Development Watchlist Search

openSUSE Build Service > Projects > devel:languages:parrot mlschroe | Home Project | Logout

Overview Packages Repositories Monitor Requests Users Subprojects Advanced

### Parrot related packages

This project contains packages related to the parrot project (www.parrot.org).


**Information**  
✔ 4 packages  
❗ 1 build error

### Build Results

OS	Architecture	Success	Failed	Disabled
Fedora_15	i586	3	0	1
	x86_64	3	0	1
openSUSE_11.4	i586	3	0	1
	x86_64	3	0	1
openSUSE_Factory	i586	2	1	1
	x86_64	3	0	1

**My Actions**

- Report bug
- Create package
- Create subproject
- Edit description
- Delete project

Sponsor  AMD Smarter Choice

Service Portal  
Packages  
Files  
Bug  
Project

```
rudin <32>
544 (rudin:devel:languages:parrot)> ls
nqp parrot rakudo
545 (rudin:devel:languages:parrot)> osc results
525 (rudin:devel:languages:parrot)> osc r
nqp
| parrot
| | post-build-checks
| | | rakudo
. . . Fedora_15 i586 (published)
. . . Fedora_15 x86_64 (published)
. . . openSUSE_11.4 i586 (published)
. . . openSUSE_11.4 x86_64 (published)
F . . openSUSE_Factory i586 (published)
. . . openSUSE_Factory x86_64 (published)

Legend:
disabled
. succeeded
F failed
546 (rudin:devel:languages:parrot)>
```



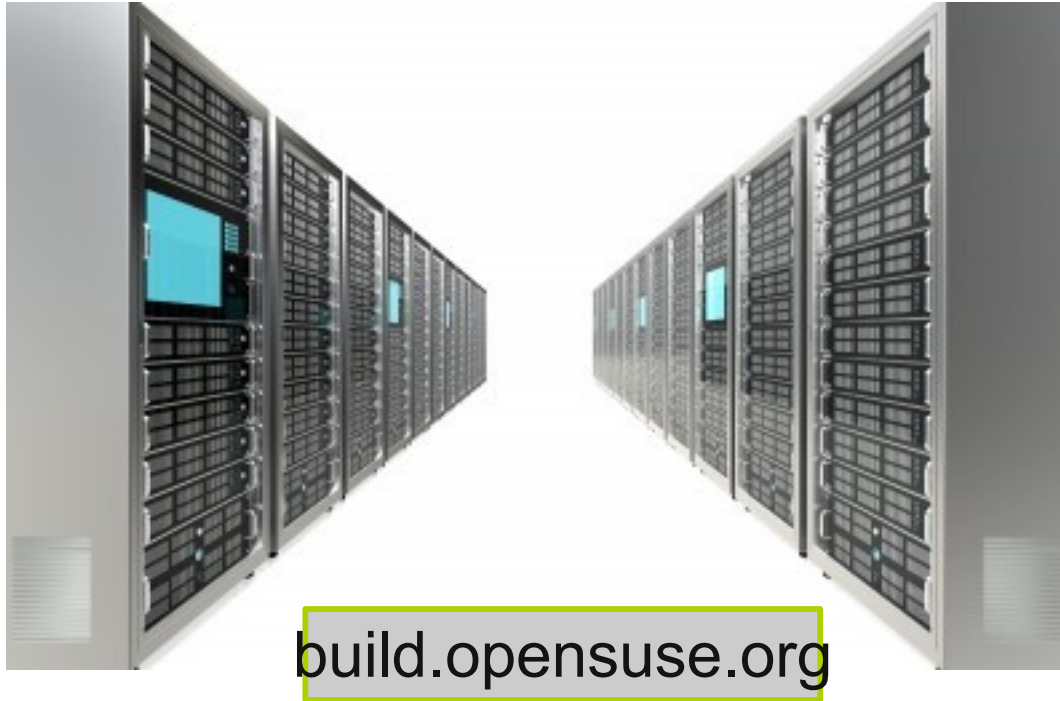
# Open Source

The screenshot shows the GitHub interface for the repository `openSUSE / open-build-service`. At the top, the GitHub logo and navigation links (Explore, Gist, Blog, Help) are visible. The repository name is displayed as `openSUSE / open-build-service` with a 'PUBLIC' label. Action buttons include 'Pull Request', 'Unwatch', 'Unstar', 'Fork' (50), and '73' stars. Below the repository name, there are tabs for 'Code', 'Network', 'Pull Requests' (0), 'Issues' (1), 'Wiki', 'Graphs', and 'Admin'. The description reads: 'A generic system to build and distribute packages from sources in an automatic, consistent and reproducible way. Release your software for a wide range of operating systems and hardware architectures.' A link to `http://openbuildservice.org/` is provided. Below the description, there are download options: ZIP, HTTP, SSH, and Git Read-Only. The Git Read-Only URL is `https://github.com/openSUSE/open-build-service.` and the access level is 'Read+Write access'. At the bottom, there are tabs for 'Files', 'Commits', 'Branches' (9), 'Tags' (54), and 'Downloads'. The repository name is repeated at the bottom left, and '1000+ commits' is shown at the bottom right.

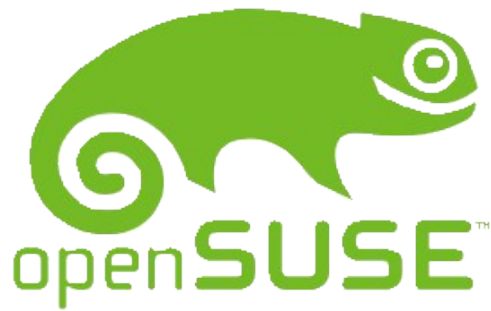


Open Build Service  
Who is using it?

# Reference Server



# Users



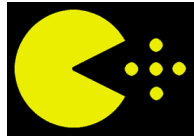


# Users

- Distribution development, Maintenance Updates



- Open Source Communities



- Add-Ons: Driver Developer and ISVs

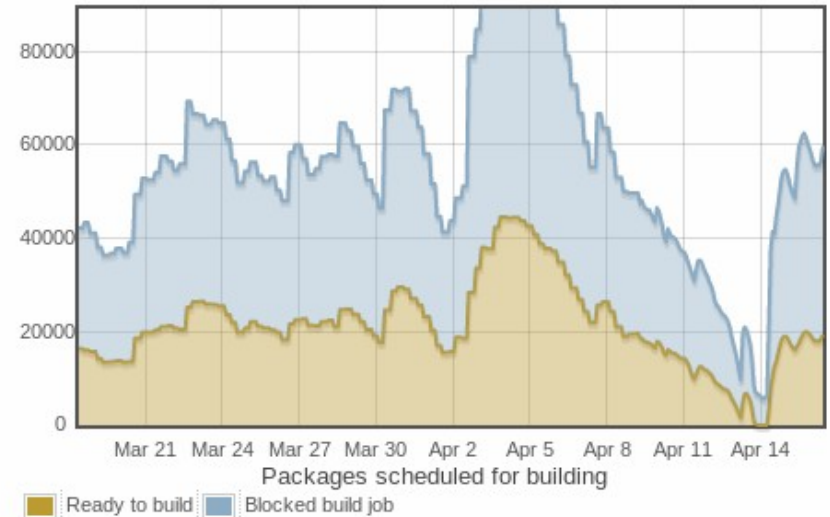


- Researchers/Universities
- Administration Teams



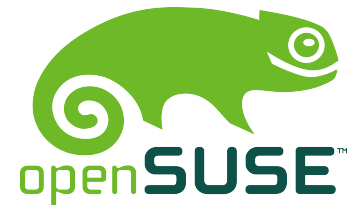
# Numbers (from build.opensuse.org)

- Confirmed Users: >35.000
- Packages: >205.000
- Projects: >2.500
- Package builds per day: > 51000
  - Build farm: ~40 hosts,  
~250 workers
- Storage:
  - Sources: 3.3 TBytes
  - Binaries: 6.9 TBytes



# Support

- Community
  - [opensuse-buildservice@opensuse.org](mailto:opensuse-buildservice@opensuse.org)
  - Irc: #opensuse-buildservice on freenode
- Professional
  - <http://www.open-build-service.org/contact/>
    - B1 Systems (L3 backing by SUSE)



# Usecase: Wine

- Alle 2 Wochen eine neue Release
- Oder vielleicht tägliche Snapshots?
- Pakete für alle SUSE Distributionen, 32 und 64bit
- Komfortabel installierbar

# Usecase: Wine

- Projekt: Emulators:Wine
- Pakete:
  - Wine
  - Wine-snapshot
  - Addons: Wine-gecko, wine-mono
  - Buildtools: prelink
- Distributionen: openSUSE \*, SLES 11 SP2, SP3
- Architekturen: i586, x86\_64, (ARM, PowerPC)
- [http://download.opensuse.org/repositories/Emulators:/Wine/openSUSE\\_13.1/](http://download.opensuse.org/repositories/Emulators:/Wine/openSUSE_13.1/)

# Usecase: Wine

Version update:

- osc ci Emulators:Wine
- vi wine.spec
  - Edit Version:
- OSC VC
  - Add changelog
- rm wine-1.\*tar\*
- osc service localrun download\_files
- osc addremove
- osc ci

# Usecase: Wine

- Daily Version Updates
  - Manual work: <empty>
  - Cronjob mit eigenem shellsript
- Alternativ: Source Services
  - Automatisch Tarbaelle aus dem GIT/SVN/etc generieren
  - Mit version: verlinkt
  - Done!

# Usecase: libgphoto2 version upgrade

- Neue major Version (2.5.x)
- Viele Programme nutzen die Bibliothek
- Ein Projekt Gphoto:Unstable
  - Libgphoto2 2.5.x
  - Gphoto2, gphotofs, gtkam
  - Digikam, f-spot, shotwell, darktable, kio\_kamera
- Für Distribution des Testrechners gebaut



# Usecase: openSUSE Factory

- Collaboration in grosser Runde
- Development Gruppen
- Reviewer Team(s)
  - Source
  - Legal
  - Factory release managers
- openSUSE Maintenance